

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P474268

Luminaire Tested: **24CZ2-65-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P474268
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-65-RDP-UNV-L840-CD1-U
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

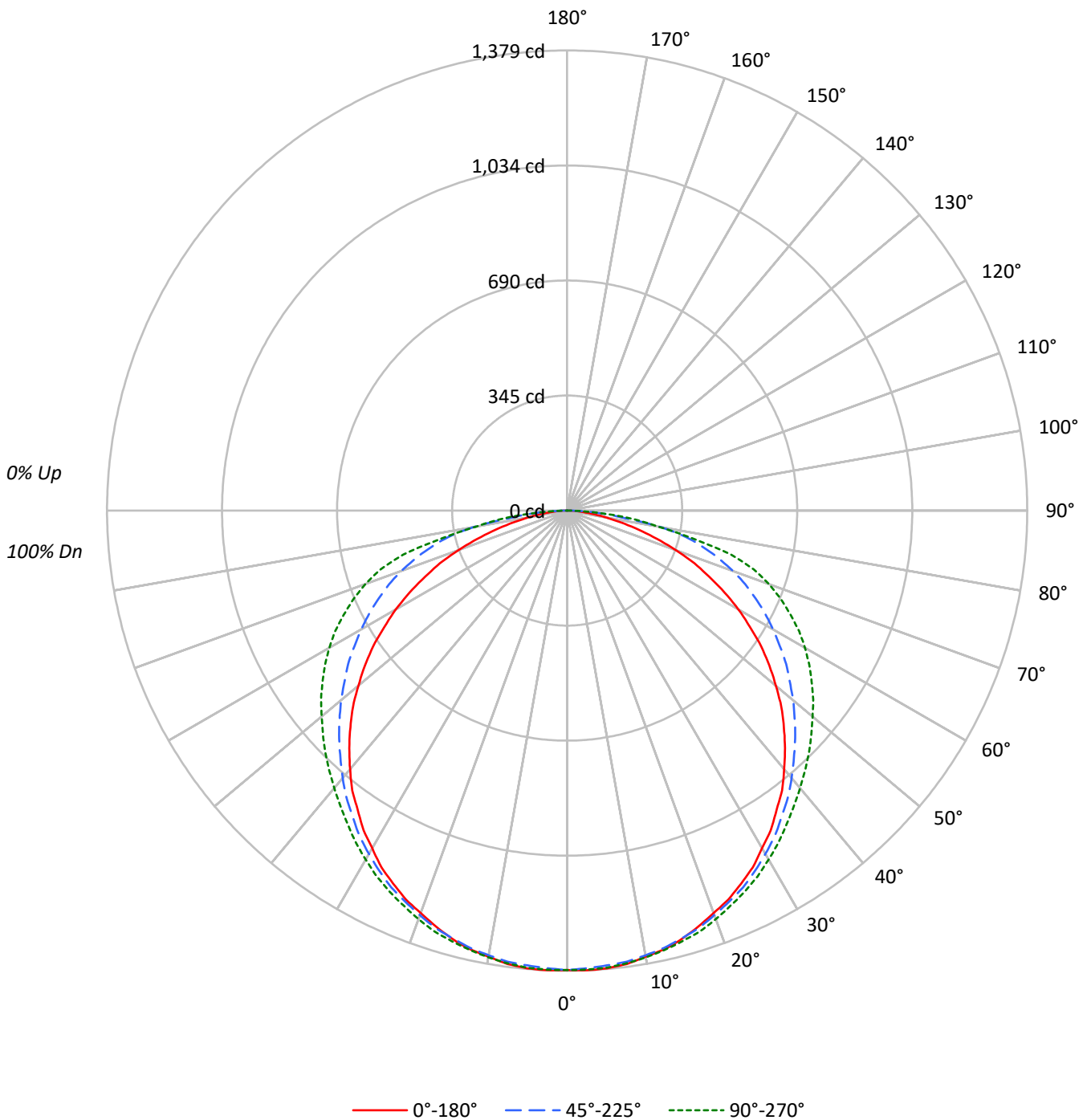
Lumens per Lamp: N/A
Luminaire Lumens: 4378.4 lumens
Efficiency: N/A
Efficacy: 85.9 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 51
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20	
RC	80				70				50				30				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1853	1853	1853
5°	1860	1848	1857
10°	1855	1849	1858
15°	1851	1848	1861
20°	1838	1847	1866
25°	1831	1851	1870
30°	1815	1846	1876
35°	1798	1841	1883
40°	1778	1838	1907
45°	1748	1839	1950
50°	1709	1850	2009
55°	1666	1880	2099
60°	1596	1917	2215
65°	1493	1984	2351
70°	1358	2076	2528
75°	1151	2190	2642
80°	909	2204	2136
85°	672	1677	1879



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.6	3.0
10°-20°	375.9	8.6
20°-30°	574.8	13.1
30°-40°	702.7	16.0
40°-50°	749.0	17.1
50°-60°	716.1	16.4
60°-70°	606.6	13.9
70°-80°	407.7	9.3
80°-90°	115.0	2.6
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1081.3	24.7
0°-40°	1784.0	40.7
0°-60°	3249.1	74.2
0°-90°	4378.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4378.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1377	1377	1377	1377	1377	
5°	1377	1375	1368	1375	1375	131
15°	1329	1329	1327	1338	1336	375
25°	1234	1238	1247	1257	1260	569
35°	1094	1103	1121	1142	1147	686
45°	919	934	966	1008	1025	709
55°	710	736	801	864	895	632
65°	469	517	623	706	738	466
75°	221	302	421	493	508	237
85°	44	89	109	117	122	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1377.0	1377.0	1377.0	1377.0	1377.0
2.5°	1379.1	1379.1	1372.6	1377.0	1377.0
5°	1377.0	1374.8	1368.3	1374.8	1374.8
7.5°	1370.4	1368.3	1363.9	1370.4	1368.3
10°	1357.4	1357.4	1353.1	1359.6	1359.6
12.5°	1346.5	1344.4	1342.2	1350.9	1348.7
15°	1329.1	1329.1	1327.0	1337.8	1335.7
17.5°	1307.4	1309.6	1311.8	1320.5	1322.6
20°	1283.5	1287.9	1290.0	1303.1	1303.1
22.5°	1261.8	1264.0	1268.3	1281.3	1281.3
25°	1233.5	1237.9	1246.6	1257.4	1259.6
27.5°	1205.3	1207.5	1218.3	1233.5	1235.7
30°	1168.4	1174.9	1187.9	1205.3	1207.5
32.5°	1135.8	1142.3	1157.5	1174.9	1179.2
35°	1094.5	1103.2	1120.6	1142.3	1146.6
37.5°	1057.5	1064.1	1085.8	1109.7	1116.2
40°	1012.1	1024.9	1046.7	1074.9	1085.8
42.5°	966.5	979.5	1005.6	1042.3	1055.4
45°	918.7	933.9	966.5	1007.8	1024.9
47.5°	870.9	888.3	925.2	973.0	992.6
50°	816.6	838.3	883.9	938.2	960.0
52.5°	764.4	790.5	840.5	901.3	929.6
55°	710.1	736.2	801.4	864.4	894.8
57.5°	649.3	684.0	755.7	827.4	860.0
60°	593.0	625.4	712.3	790.5	823.1
62.5°	532.1	575.6	668.8	751.4	784.0
65°	469.1	516.9	623.2	705.8	738.3
67.5°	412.6	464.8	577.8	660.1	692.7
70°	345.3	410.5	527.8	610.1	642.7
72.5°	282.3	354.0	475.6	556.0	586.5
75°	221.4	301.8	421.3	493.0	508.2
77.5°	165.1	249.7	364.8	395.2	384.4
80°	117.3	199.9	284.4	269.2	275.7
82.5°	76.1	152.1	176.0	199.9	206.2
85°	43.5	89.1	108.6	117.3	121.7
87.5°	19.6	32.6	43.5	43.5	41.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)